patients gave strongly positive skin reactions by scratch test to castor bean allergen. All nine owed their difficulty to breathing dust from burlap bags which had at one time contained, or had been contaminated by, castor beans or castor bean pomace.

When first asked to ascertain the cause of the severe symptoms in the four office workers, the authors assumed, after surveying the premises, that it was the green coffee dust. On further testing, when all gave more strongly positive skin reactions to castor bean allergen, it was realized that this was more than a coincidence. However, in several cases the coffee fraction in the green coffee dust was a factor as well as the castor bean component of the dust. All nine patients reacted strongly to purified castor bean allergen. Eight of these also reacted to green coffee dust extract, which represented the coffee bean allergen plus a minute component of the castor bean allergen. Four of the eight failed to react to an extract of green coffee beans carefully washed to exclude the castor bean contaminant. Thus it may be assumed that four of the eight patients are sensitive to castor bean allergen only, while the other four are sensitive not only to castor bean allergen but to a lesser degree to the coffee bean allergen present in the green coffee dust. The coffee bean contains an allergenic fraction that is stable on autoclaving for 20 minutes at a pressure of 15 lb. (6.8 Kg.) but is inactivated by the commercial roasting process.

The authors stress that the castor bean contains the most potent allergenic fractions known to man. In addition, the castor bean contains a toxic albumin, ricin, which rivals cobra venom or diphtheria toxin in potency. Accordingly, ordinary aqueous extracts of castor bean should never be used even for scratch testing, and never should castor bean extract of any description be used for direct intracutaneous skin testing. An extract from which the ricin has not been removed will cause more or less severe toxic lymphangitis even on scratch testing. As for intracutaneous testing, even dericinized extracts, highly diluted, may cause alarming constitutional reactions. Therefore only dericinized castor bean extract should be used for skin testing, and then only by the scratch (dermal) method.

IDENTIFICATION OF CASTOR BEAN ALLERGEN IN GREEN COFFEE. E. J. COULSON, J. R. SPIES and H. STEVENS, J. Allergy **21**:554 (Nov.) 1950.

This report supplements the clinical evidence which led Figley and Rawling to recognize apparent sensitiveness to green coffee dust as actually castor bean allergy. Their interest in the identification of castor bean allergen prompted examination of additional specimens of green coffee dust and other coffee products collected from different sources.

Castor bean allergen was identified in three samples of green coffee dust from different coffee-roasting plants. Castor bean allergen was also found in one sample of cleaned green coffee beans from a commercial source. Thus the results amplify Figley and Rawling's observations and imply that it is not exceptional for green coffee to be contaminated with some castor bean derivative.

No castor bean allergen was detected by Coulson and his co-workers in samples of parchment coffee or cleaned green coffee beans which were produced at a Guatemalan experiment station and were known to have had no contact with castor bean.

Available evidence indicates that hazards resulting from castor bean contamination of green coffee are significant only to those who are exposed to green coffee.

CLASSIFICATION OF CHEMICAL SUBSTANCES USED IN INDUSTRY ACCORDING TO THEIR ACTION ON THE SKIN. A. P. DOLGOV, Vestnik ven. i dermat., 1949, no. 6, p. 7.

The classification is (1) definite irritants, such as mineral acids, strong alkali; (2) sensitizers, such as dinitrochloro-benzene, turpentine; (3) substances with combined effects of 2 and 2, such as the dichromates; (4) petroleum hydrocarbons, which act principally as inducers of dermatitis; (5) substances which are without action on the skin but penetrate it readily and cause toxic effects within the organism; $PhNH_2$ belongs to this group.

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